

Interventions that Increase Enrolment of Women in Higher Education: The University of Dar es Salaam, Tanzania

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Abstract

Gender equality and equity has long been a focus area in Tanzanian government, encouraging the increased recruitment of female students in to higher education. This article investigates the effectiveness of affirmative action policy interventions that introduced and designed to increase female students' enrolment at the University of Dar es Salaam. The study based on the data obtained from University of Dar es Salaam records and report, documentary of key policies, online articles, publications and ministry of higher education website. Using the case of the University of Dar es Salaam (UDSM) was justified by, is the oldest and largest institution of higher education in Tanzania that has a large in terms population and offers a verity of disciplines in both science and Humanities. The findings from this study reveal that affirmative action policy interventions have positive effect towards increasing recruitment female students at the University of Dar es salaam. However the date shows that the number of female students is still low in Sciences and Engineering disciplines compared to that of their male peers. This suggests that men dominated all specializations in the faculty of science.

Keywords: Gender equity, Access to high education, Affirmative action

1. Introduction

Widening participation of women's in higher education has been a policy priority in Tanzanian government. Traditional, there is a wide gender gap when it comes to higher education whilst there are no real problems of access to primary education, the trend towards fewer girls in education starts to appear at secondary school level and accelerates markedly in higher learning institutions. This article shows that gender equity at the University of Dar es Salaam was promoted by affirmative action policy interventions, national and international policy initiatives, coalitions as well as community links. Several international agencies including UNESCO, UNICEF, and the World Bank have recognized the importance of eliminating women's illiteracy and enhancing access to education for women. For example, In 2003 UNICEF provides technical support to the Government of Tanzania through participation in the Expanded Enrolment, Quality, and Institutional Arrangement Technical Working Groups, as well as the Basic Education Development Committee which is a policy decision making body.

Currently in the year 2010/2014, the University of Dar es Salaam continued to expand the enrolment of undergraduate students. It reported that, the ratio has largely remained the same in (2009/10- 38%) to (2010/2011-39%) and has slightly decreased from 39% in 2010/11 to 33% 2013/14 academic years. From the mid of 1990s affirmative action policy interventions were introduced to meet these challenges.

1.1 Higher education in Tanzania historical back ground

In Tanzania, higher education is defined as that proportion of tertiary education that leads to an advanced diploma or degree. Education system in Tanzania include two years pre-primary, seven years primary, four years junior secondary, two years senior secondary (A level) and three or more years of university or tertiary education. The last decade has seen a significant expansion of higher education in Tanzania. Whilst up to the mid-1980s there were only two universities and a handful of other specialist higher education colleges, by 2005 there were a total 30 universities, the majority of these being private. Also there were 15 additional public Institutions of Higher Education including 6 professional institutes, 2 institutes of technology, a wildlife college and a business college. Further expansion has taken place this decade, where by 2008 there were six public universities. In 2004, 26,475 students were enrolled at public universities and 2543 students enrolled at private universities (Pigozzi 2006)

All Universities in Tanzania are regulated by the Tanzanian Commission of Universities (TCU). The TCU was established as a body corporate by the Universities Act No. 7 of 2005 (Chapter 346 of the Laws of Tanzania) The Commission is mandated to recognize, approve, register and accredit universities and university-level programmes in Tanzania, anzd to coordinate 'the proper functioning of all university institutions in Tanzania so as to foster a harmonized higher education system in the country. The government supports both private and government universities through cost sharing Policy (1988), for all course programmers. (HESL) - Act No.7 of 2004. From 2005/06 outstanding students who attained a Div. 1 grade in the final form V1 (Advanced Level) examinations and girls with a science specialization with a Div. 11 directly qualified for the loan scheme. (Puja 2009).

The UDSM as selected as a study sample began its history in 1961 as a College of the University of London, with only one faculty (Law) and fourteen students. Together with Makerere University College in Uganda and Nairobi University College in Kenya, it became a Constituent College of the University of East Africa in 1963. The national university, UDSM, was established in August 1970. The primary focus of the UDSM was to be an institution where people are trained at the highest level for clear and independent thinking, analysis and problem solving. In 2005, UDSM had a total of 12 945 students, making it the biggest university in the country. It has the largest intake of students and offers the widest selection of courses, amounting to 53 degree programmers. (www.tanzania.go.msthe).

1.2 Gender equity and high education in Tanzania.

Gender equity in higher education is more than putting women on equal footing with men it is eliminating barriers to participation and stereo types that limit the opportunities and choices of both sexes. Gender equity is about enriching classrooms, widening opportunities, and expanding choices for all students (Bailey 1996). Since the independence 1961 the government of Tanzania has put in place a sector wide approach to education and the Education Sector Development Programme in an effort to reduce gender disparity in the education sector and to improve the quality of education. The international and regional agreements related to women's rights have developed a number of national policies that constitution bans discrimination on whatever grounds. On another hand the National Education and Training Policy of 2002, National Education Act of 1978 and the National Higher Education Policy of 1999 provides guidelines for achieving gender equity and equality in the various levels of education (Onsongo 2009).

Gender inequality in Tanzanian higher learning institution started during the transition from primary to secondary schools. However the government has achieved gender parity in primary and secondary school enrolments hence girls' performance in the primary school leaving examination results remains lower than boys', and gender differentials in enrolment widen in higher secondary and in higher levels of education. For example, by 2011, out of 325,799 (136,629-girls, 187,170-boys) 'Form IV' students who were examined for the final Certificate of Secondary Education Examination, those who qualified for Form V and Technical Education selection were 31,658 (9.72%) of present candidates. Total selected candidates were 31,423 (9.64%), of which girls were 9,369 (6.76% of all present girls) and boys were 22,054 (11.78% of all present boys). this suggest that, very few girls will complete Form VI and Technical Education, and consequently be eligible to enroll for university studies.(Lihamba, Mwaipopo et al. 2006).

2. Data and Methodology.

Available data used in this paper to find out the facts behind the effectiveness of interventions introduced and designed to increase female students' enrolment at UDSM. The data were gathered from the University of Dar es Salaam records and report, books as well as documentary of key policies, online articles, publications and the ministry of higher education website. The data was analyzed using qualitative and quantitative methods. The selection of the study sample (UDSM) was justified by, was the oldest and largest institution of higher education in Tanzania that has a large in terms population. The data presented in statements and in some few cases tables and figures to enable a quick grasping of the specifics.

3. Theoretical perspective

3.1 Gender equity and access

According to the Liberal feminism theory, feminist's belief in equality for women and men, this school of thought rooted in the belief that women as well as men are rights bearing and autonomous human beings. The liberal feminists' theory includes the claim that the abolition of gender segregation of occupational roles is necessary for the achievement of women's equality. Liberal feminists believe changes in equal opportunities and educational policies, e.g. the National Curriculum, will end patriarchy, (Agassi 1989). Over the decade, issues concerning women have taken new dimension and received varied treatment by the United Nations and its specialized agencies. The principle of equality of men and women was first recognized in (1945) in the United Nations charter and subsequently in the universal deceleration of human rights (1948) (Morley 2005). Since then, the UN has helped create a historic legacy of internationally-agreed strategies, standards, programmes and goals to advance the status of women worldwide. Over the years, the UN and its technical agencies have promoted the participation of women as equal partners with men in achieving sustainable development, Education, and full respect for human rights. The empowerment of women continues to be a central feature of the UN's efforts to address social, economic and political challenges across the globe.

The United Nations Decade for Women (1975–1985) had an impact on issues of gender in Tanzania. The United Nations Development Fund for Women (UNIFEM) was created as a separate and identifiable entity within the UN system in autonomous association with the United Nations Development Programme. One among of the objective of UNIFEM was to promote women's participation in the decision-making of mainstream

development programmes and equality of women in the developing world.

The World Education Forum's participants in Ensuring that, by 2015 all children particularly girls children in difficult circumstances and those belonging to ethnic minorities have access to and complete free and compulsory primary education of good quality and eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality(Lihamba, Mwaipopo et al. 2006). The UNESCO World Conference on Higher Education (1998) demanded the elimination of all gender stereotyping in higher education envisaging elimination at all levels and in all disciplines in which women are under-represented and an increase of women's active involvement in decision-making.

3.2 Affirmative action historical back ground.

Affirmative action refers to a body of policies and procedures designed to eliminate discrimination against marginalized groups including ethnic minorities, and women. Its main objective is to redress the effects of past discrimination (Onsongo 2009). (Pojman 1998), admitted that, AA includes any policies that attempt to actively dismantle institutionalized or informal cultural norms and systems of inscriptive group based disadvantages, and the inequalities historically resulting from them, and also to promote an ideal of inclusive community, as in ideals of democracy, integration, and pluralism, by means that classify people according to their inscriptive identities, for example race, gender, ethnicity and sexual orientation. (Tierney 1997), identified three forms of AA as compensatory procedure to address past injustices, a corrective tool to address present discrimination and an intervention to promote social equality and diversity in a given society

In the USA, AAs have been used to give preference of access to disadvantaged minority groups (including African–Americans, Latin-Americans, and Native-Americans) and to women. AAs have also been used to promote group cultural identities and inculcate the understanding that it is a right to make such demands. Initially AA policies focused on improving opportunities for African Americans in employment and education, outlawing school segregation and improving life prospects for African Americans. According to data from the [National Center on Education Statistics](#) (NCES), in 2007, 70 percent of white high school graduates immediately enrolled in college, compared to 56 percent of African American graduates and 61 percent of Hispanic graduates. [More recent data from NCES reports](#) some changes in this gap, most notably for African American students. The updated report finds that in 2011, 69 percent of white high school graduates immediately enrolled in college, compared to 65 percent of African American graduates and 63 percent of Hispanic graduates. ([National Center on Education Statistics](#) (NCES). Affirmative action in Tanzania is a constitutional issue that female representation in the professions and politics was very low. The Constitution 1977 stipulates the proportion of women in all sectaries, particularly in parliament through women special seats to be not less than 30 percent of all members (Constitution of the United Republic of Tanzania 1977). In 1990 the ruling Party introduced guidelines for increasing women's representation in Parliament where by only 11% were members of the parliament. In 2001 the number increased to 22.5% and in the current 2005–2010, female representation in the parliament has reached the projected 30%.

3.3 Affirmative action in Tanzania higher institutions.

Affirmative action (AA) has been practiced in Tanzania since the early 1990s. In institutions of higher education, affirmative action refers to admission policies that provide equal access to education for those groups that have been historically excluded or underrepresented, such as women and minorities. (Wanyande 2003). The Tanzanian government has put in place a sector wide approach to education and the Education Sector Development Programme in an effort to reduce gender disparity in all levels of education. The Musoma Resolution of 1974 was the first of affirmative action policy interventions that resulted in the increase of female enrolment at UDSM. Through the Musoma Resolution, females were able to enter the University directly from secondary schools and were thus exempted from 2 year compulsory work period that their male counterpart (Lihamba, Mwaipopo et al. 2006).

In 1977, The Government has developed various plans based on macro and, sector policies committed to achieve Universal Primary Education (UPE). The government managed to create a near equity gender enrolment in primary schools where by through UPE programs enrolment had risen to 93% in 1980. The objectives of the UPE plans were to enhance access and equity, improve quality, strengthen capacities, address cross cutting issues, strengthen institutional arrangements, undertake educational research, and conduct educational monitoring and evaluation. On other hand the Government of Tanzania launched the Primary Education Development Plan (PEDP) in 2002. The aims were to materialize Tanzania's commitment towards the global Education for All (EFA) targets articulated by the international community in Jomtien and Dakar. The main priority of PEDP is to increase equal enrolment of girls and boys.

The country has signing international and regional agreements related to women's rights, which develop a number of national policies. The Women Development and Gender Policy 2000 provide policy guidelines to

other sectors on how to achieve gender equality and equity. The National Education and Training Policy of 2002, National Education Act of 1978 and the National Higher Education Policy of 1999 provide guidelines for achieving gender equity and equality in all levels of education (Onsongo 2009). The higher Education Development Programme (2010 – 2015) envisages addressing issues of access and equity of women in higher education in relation to increased enrolment of female students especially in science and technology programmes, to provide friendly physical learning environments, loans, grants and scholarships. The Tanzanian government is also a signatory to the UNESCO Convention against discrimination in education. Government has ratified the African charter on Human and People's Rights (1981) and the Southern Africa Development Cooperation (SADC), Declaration on Gender and Human Rights (1997).

4. Affirmative action programmers at UDSM

Gender inequality in fields of studies is common and typically based of Science subjects and Arts subjects, very few female students are admitted in science fields especially in Mining Engineering, Mechanical Engineering, and Civil Engineering etc... (Petro, Wasson et al. 2011). At (UDSM), the AA policy was instituted in 1997/1998 academic year. Several strategies have been introduced to facilitate the entry of more female students at the University of Dar es Salaam. For example, higher enrolments for female students has been achieved by lowering the entry cut-off point by 1.5 points for women, female students assisted by being given remedial classes in order to improve their performance and retention in science and mathematics subjects and giving undergraduate Scholarship which for three years benefited 50 female students each year under its programme, and an initiative for enrolment of female students in the Engineering disciplines.(Morley, Leach et al. 2010).

The discussions focus on three affirmative action programs and the procedures used in implementing the various interventions that have been implemented at UDSM to increase women's enrollments. These include lower entry scores, remedial pre-university programmers and financial assistance. In general various interventions have increased the number of women enrolled at the University of Dar es Salaam however the ratio of female students has largely remained below 30% over the couple of years. In the Faculty of Science, female enrolment had been 16% in 1996 but rose to 27% in 2003/2004. In Engineering it rose from 7% in 1996 to 13% in 2003/04 while the Faculties of Arts and Social Sciences, and Law had reached parity by 2004 (Morley, Leach et al. 2010).

The data in Table 1 shows the Percentage of female students admitted before and after affirmative action in 2000/2001 in UDSM. The date shows that, there was an increase in the number of female students admitted to the University of Dar es Salaam in a number of courses after the use of affirmative action. The percentage of female students admitted without affirmative action in the year 2000–2001 was 15% while with affirmative action it increased to 27% (FAWE 2001). After affirmative action female enrolments in law, education and medicine were under 50% except arts with 51%.

Table1. Percentage admitted before and after affirmative action in 2000/2001 in UDSM.

Course	Before affirmative action	After affirmative action
Arts	13%	51%
Law	28%	48%
Education (Arts)	12%	25%
Medicine	8%	25%

Source: FEWE (2001, 19).

Remedial Pre-University Programmers

In 1997 the faculty of science introduced a pre-entry program (PEP) whereby female students who had not attained the cut-off points were given a remedial programme of six weeks if they passed this course they gained admission to the university. It reported in 2000/2001 admissions, very few females qualified for admission into the engineering and science programmes in University of Dar es Salaam even after the lowering of cut off points. Remedial courses have increased the number of women enrolled at UDSM. For example, between 1997 /2000, 214 female students entered highly competitive SMT related programmes such as engineering, medicine and architecture through remedial courses, (Masanja 2001).

It has been reported that PEP entrants were seen to perform equally as other students. The 1999/2000 performance assessment of the pre-entry programme for female students in science indicates that some of the remedial programme entrants were performing better than their direct entry male and female peers, the top 20

students in the chemistry or biology subject combinations were remedial programme entrants. (Masanja 2001).

Late on there were additional outstanding performances by individual PEP students. In 2001/02 the best performing student in physics was a student admitted through PEP entrant, 2002/3 the best performance in the 1st year of the Land Survey programme was by a PEP entrant and also a BSc Nursing student admitted in 1998 scored three awards as the most outstanding student in that class. These students were awarded postgraduate scholarships in the Faculty of Science, (Nawe 2002). This suggests that students admitted through pre-entry program intervention are competent enough and they are not inferior academically.

The data in Table 2 shows that, 2000/01 PEP female students' enrolment increased for 27% however Female enrolments in all the science discipline were under 50% exception nursing seem to attract more students than other faculty with the racial of 57%.

Table2: UDSM 2000/01 PEP female students' enrolment.

Programme	Total admitted	Total female admitted	Female admission same criteria ^a	Female admission after PAC	% Female admission with same criteria	% Female total admission
BA	494	242	74	168	23%	49%
B.Com.	273	45	45	Not used	16%	16%
B.A (Ed.)	144	34	20	14	15%	24%
Engineering	405	23	11	12	3%	6%
Law	197	101	61	40	39%	51%
UCLAS	212	25	17	8	8%	12%
Medicine	132	33	22	11	18%	25%
Dentistry	14	0	0	Not used	0%	0%
Pharmacy	26	12	12	Not used	46%	46%
PESC	25	13	1	12	8%	52%
Nursing	23	13	3	10	23%	57%
Sciences	382	87	44	43	13%	23%
Total	2341	628	310	318	Average 15%	27%

Source: Admissions Office Records, University of Dar es Salaam, 2003

Lower Admission Cutoff Points for Females

Since 1997 UDSM have implemented policies to allow female candidates who have attained the minimum required marks in science related degree programmers such as engineering, pharmacy, environmental engineering, dentistry, and nursing to enter with lower cutoff points (at 1.0 or 1.5 points). At UDSM the application of PAC depends on the number of applicants in each year and the level of performance in relation to minimum entry qualifications. Lower admission cut off points for females is applied by the whole University in faculty of science.

The date in Table 3 shows the 2005/2006 preferential admission criteria as applied for UDSM admissions in selected disciplines. This suggests that the number of female students is still low, AA program has not been able to enhance gender equity in science and engineering disciplines at the University of Dar es Salaam. Only Pharmacy discipline had female enrolment nearly 40% in the year 2005/2006.

Table3. 2005/2006 PAC as applied for UDSM admissions in selected disciplines

Degree programme	Total number admitted	Number admitted (M/F)	% of female students admitted	UDSM entry qualifications			
				UDSM entry qualifications		Matriculation cut-off score (%)	
				M	F	M	F
BA (Culture & Heritage)	17	7	10	59	10.5	8.5	60+ 53+
BA (Fine & performing Arts)	22	9	13	59	9.5	8.5	69+ 50+
BA (Statistics)	31	26	5	16	8.5	6.5	62.7+ 56+
BA (Political Science & Sociology)	90	44	46	51	11.5	11.5	72+ 47+
BSc (Mechanical Engineering)	13	11	2	15	6.5	7.5	52+ 52+
BSc (Chemical and process Engineering)	20	16	4	20	7.5	6.0	50+ 62+
BSc (Mining Engineering)	18	16	2	11	7.5	9.5	60+ 63+
BSc (Computer Engineering and Information Technology)	4	4	0	0	4.4	4.1	40+ –
BSc (Pharmacy)	30	19	11	37	9.0	8.0	40+ 40+
Doctor of Dental Surgery	35	30	5	14	8.0	7.0	40+ 40+
BSc (Land Management & Valuation)	68	52	16	24	8.5	6.5	59+ 62+

Source: Admissions Office Records, UDSM, November 2005(UDSM, 2005a)

In 2010/2014, the University continued to expand the enrolment of undergraduate students whereby students were registered to pursue undergraduate studies in various degree programmes. The date in Fig. 1 shows that, out of the 19,986 undergraduate students registered at UDSM in the 2013/14 academic year, 7,051 students (equivalent to 35%) are female, in the 2012/13 academic year out of the 17,197 undergraduate students

registered 6,345 students (equivalent to 37%) are female. The ratio of female to male undergraduate students has slightly decreased when compared to the last three years (39% in 2010/11 and 35% in 2013/2014). This ratio continues to be low in Sciences and Engineering disciplines (15% in Engineering, 23% in Information and Communication Technologies and 28% in Natural and Applied Sciences). The faculty of Arts and Social Sciences continue to attract more female students than other faculty and accounts for 35% of all admitted students. More female students tend to register for Kiswahili studies (51%), Journalism and Mass Communication studies (62%), Social Sciences (47%), Laws (46%) and Business studies (46%).

2009/10- 2013/14 Undergraduate Admission Trends at UDSM

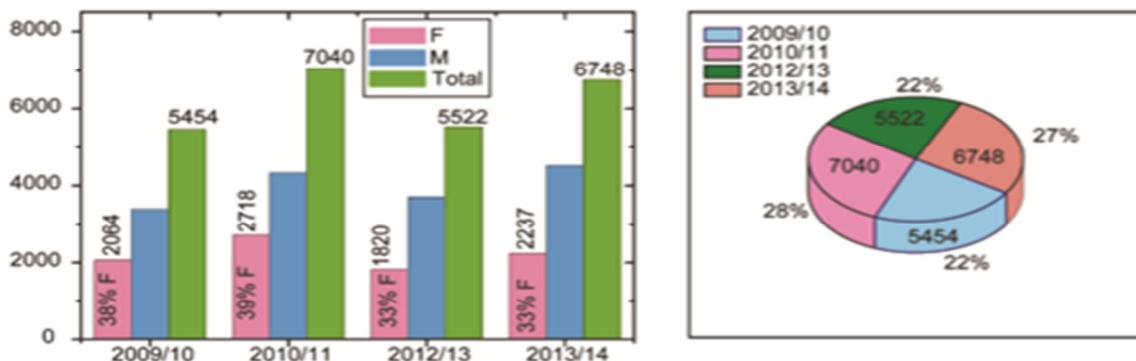


Figure 1. University of Dar es Salaam ANNUAL REPORT 2013-14

At UDSM exclusive scholarship schemes for women have been introduced since the early 1994 to date. A number of bursaries through international agencies have been provided for undergraduate and postgraduate studies in all discipline to enhance the capacity of UDSM to promote gender mainstreaming with improved female education. However there are scholarships targeting females only and the other targeting both males and females students, (Nawe 2002). These scholarship schemes include;

- The Female Undergraduate Scholarship Program (FUSP) financed with assistance from the Carnegie Corporation of New York and managed by the University of Dar es Salaam Gender Centre. Its main objective was to give opportunities to financially female students who would not access university education. Through this scholarship scheme UDSM was able to offer 50 scholarships to undergraduates to all disciplines covering three years of study. This Special scholarship has boosted the number of female admission by 50. (Gender Centre UDSM, 2008).
- The Norwegian Development Organization (NORAD) scholarship programmers for female and male postgraduate students but special favor are given for female students.
- The Human Resources Development and Trust Fund (HRDTF). The scheme operated from 1997 to 2003, its main objective was to promote enrolment into engineering programmers for both male and female students, but also favoring female's students. Male students were required to contribute 20% of tuition fees, while female students were exempted.
- The Swedish International Development Agency scholarships through the (SIDA) fund, mainly to support UDSM's human resources capacity building programme, through post-graduate training for female staff.

The date collected a couple of year's show that, students enrolled through the HRDTF (1997–2003) was almost 30%. In the year (1998- 2003), 56% of 200 students supported by SIDA/SAREC scholarships were female. While (2001–2005) about 356 female students supported by FUSP, among them 128 have graduated and 13 of them have enrolled in postgraduate programmers at UDSM, (Onsongo 2009)

Conclusions and Recommendations

Even though Affirmative action policies and practices have succeeded in increasing female enrolment at UDSM, still the ratio is low and slightly decreased in Sciences and Engineering compared to other disciplines. To ensure 50-50 enrolment of female students in all faculty at the University of Dar es Salaam, the university should have a top priority in all disciplines by raising the level of literacy among females and develop new strategies to promote and create change that will accommodate and value women students as they value males. On other hand the university should have a Short-term strategy for enhancing females' participation including systematic gender sensitization programmes such as introduction of a quota system in both career development capacity building endeavors and assignment of responsibilities.

The researcher makes some recommendations to the UDSM and the government of Tanzania on the measures to be taken to attract more female students as follows; First, since very few girls complete secondary education and consequently be eligible to enroll for university studies, the government should focus on ensuring

girls' education and strengthen a strong technical support mechanism to enhance women's access to all level of education. Second, the government should mobilize and allocate enough resources to all education intervention programmers and promote gender stereotype in the education system. Third, promoting gender equality, balance and equity that AA should be expanded with the condition that, be implemented in support of 50/50 enrolment and recruitment in the long term and target females student with special talents in all discipline and not only in Science subjects. Fourth, at the institutional level gender awareness campaign among female students should be more emphases by organizing seminars, workshops and developing a policy for equal opportunity. Therefore, for affirmative action to have an effect, these interventions should introduce permanent and dynamic tools for understanding and addressing the moving contours and depth of the gender equity in to higher education.

References

Agassi, J. B. (1989). "Theories of gender equality: lessons from the Israeli Kibbutz." *Gender & Society* 3(2): 160-186.

Bailey, S. (1996). "Shortchanging girls and boys." *Educational Leadership* 53(8): 75-79.

Lihamba, A., et al. (2006). *The challenges of affirmative action in Tanzanian higher education institutions: A case study of the University of Dar es Salaam, Tanzania*. Women's Studies International Forum, Elsevier.

Masanja, V. (2001). *Structural changes and equal opportunities for all: A case study of the university of Dar es Salaam*. A paper commissioned by FAWE and presented at the 10th General Conference of the AAU. Nairobi.

Morley, L. (2005). "Opportunity or exploitation? Women and quality assurance in higher education." *Gender and Education* 17(4): 411-429.

Morley, L., et al. (2010). "Widening participation in higher education in Ghana and Tanzania: Developing an equity scorecard." ESRC/DFID Poverty Reduction Programme Research Project. Available online at: <http://www.sussex.ac.uk/education/cheer/wphegt>.

Nawe, J. (2002). "Female participation in African Universities: effective strategies for enhancing their participation with reference to the University of Dar es Salaam, Tanzania."

Onsongo, J. (2009). "Affirmative action, gender equity and university admissions-Kenya, Uganda and Tanzania." *London review of education* 7(1): 71-81.

Petro, J., et al. (2011). Stator and rotor-stator structures for electrodynamic machines, Google Patents.

Pigozzi, M. J. (2006). "A UNESCO view of global citizenship education." *Educational Review* 58(1): 1-4.

Pojman, L. P. (1998). "The case against affirmative action." *International Journal of Applied Philosophy* 12(1): 97-115.

Puja, G. K. (2009). "Cost-Sharing in Higher Education in Tanzania: The Experiences of the 1990s and One Decade Later." *Comparative and International Education/Éducation Comparée et Internationale* 38(1): 61-76.

Tierney, W. G. (1997). "Organizational socialization in higher education." *The Journal of Higher Education* 68(1): 1-16.

Wanyande, P. (2003). "Affirmative action for Kenyan women: An analysis of the relevant provision of the draft constitution." on gender discourse: 49.